

Docket No.: 0696-0219PUS1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Aarto PAREN et al.

Application No.: 10/541,775

Confirmation No.: 1488

Filed: March 10, 2006

Art Unit: 1791

For: BLEACHING OF CELLULOSIC FIBRE  
MATERIAL WITH PEROXIDE USING  
POLYMERS AS A STABILISER

Examiner: A. J. Calandra

**DECLARATION SUBMITTED UNDER 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

December 17, 2009

Sir:

I, Jonni Ahlgren of the R&D Department in Kemira Oyj company, Finland, do hereby declare the following:

I have attached a copy of my curriculum vitae to this Declaration.

I am a Senior Principal Scientist in the expertise area of water soluble polymers and have worked in this field for 18 years.

I am familiar with the above referenced patent application, as well as the development, usages and properties of polymer compounds.

I have read and understand the subject matter of the Office Action of August 19, 2009.

The following comments are offered in support of the patentability of the instant invention.

On page 5, lines 4-8, of the Office Action dated August 18, 2009, the Examiner asserts that page 11, lines 4-5 and page 6, lines 25-26 of the application states that the conventional method of making a polymer/copolymer of acrylic acid, maleic acid and methacrylic acid is by the use of radical copolymerization. The Examiner also states that page 11, line 7 of the application discloses that the polymers formed by radical polymerization have a pH of about 4. In the next paragraphs the Examiner concludes that the person of ordinary skill in the art would expect predictable results from radical copolymerization of monomers including the formation of polymers at a pH of about 4. I cannot agree with the Examiner's conclusion.

I believe that the Examiner has misunderstood the steps and/or actions associated with the "conventional radical copolymerization technique." Reference example 1 on page 11 presents an accurate description of the actions that are associated with this technique. These actions include treating the "raw" polymer solution obtained from the homopolymerization or copolymerization which has an acidic pH (such as a pH of 4) with treatment with alkali, such as sodium hydroxide, to adjust the "final" polymer solution to a pH of 8. In other words, the "conventional radical copolymerization technique" always resulted in a polymer solution of pH 8.

Because convention taught that an alkali treatment must be conducted before the polymer solution was suitable for use, the skilled artisan would not have thought to truncate the "conventional" method and to use the "raw" acidic polymer solution as a component in a bleaching process. Even if this had been tried, the scientist would not have had a reasonable expectation of success because the standard/conventional treatments required adjustment of the polymer solution to an alkaline pH and there could be no assurance that any subsequent reactions would proceed as expected in such a different pH environment. In my opinion, it would not have been obvious at all to cut the conventional method short and use what amounts to an "unfinished" polymer solution.

In my opinion it is also surprising that using the product from the truncated conventional method generated such different results. Comparing the results of Reference example 1 (page 11) which uses the full conventional method and the results of Example 1 (page 9) which uses a

truncated version of the conventional method, it is clear that the solution resulting from Example 1 was significantly more stable. This increased stability has significant consequences for production costs and efficiencies. Certainly I would not have expected that an improved product would result from the use of this process; rather I would have expected a non usable product.

The undersigned hereby declares that all statements made herein based upon knowledge are true, and that all statements made based upon information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

DATED:

Espoo, December 21, 2009



Jonni Ahlgren  
Senior Principal Scientist, M. Sc. (Chem. Eng.)

Name Ahlgren, Jonni Juhani  
Date of Birth November 9, 1964  
Place of Birth Ähtäri, Finland  
Home address Kalenteritie 1 B 3, 02200 Espoo  
Mobile phone number +358 50 351 6983  
e-mail jonni.ahlgren@kemira.com  
Degrees Master of Science (Chem. Eng.), Helsinki University of Technology, Chemical Engineering, 1989  
Matriculation at Lohjan lukio 1983

Post Graduation Studies

Helsinki University of Technology 1989-1991  
Main subject: Polymer Technology (passed 25/25 study weeks)  
Secondary Subject: Industrial Chemistry (passed 6/10,5 study weeks)  
Professional Secondary Subject: Organisational Operations (passed 9,5/9,5 study weeks)

Language skills Finnish (mother tongue), English (very good), Swedish (good), German (adequate)

Professional experience

**Kemira Chemicals Oy and Kemira Oyj 1991-**

- Senior Principal Scientist, 2008-
- Key Customer Manager, 2006-2008
- Development Manager, 2005-2006
- Chief Chemist, 2003-2005
- Deputy R&D manager, 2001-2003
- Principal Scientist, RPS-laboratory (retention, process chemicals, synthesis), 1998-2001
- Principal Scientist, process chemicals, 1995-1998
- Scientist, synthesis laboratory, 1991-1995

**Helsinki University of Technology 1986-1991**

- Teaching Assistant, Laboratory of Industrial Chemistry and Polymer Technology, 1989-1991
- Scientist, Laboratory of Industrial Chemistry and Polymer Technology, 1989
- Research Assistant and Master's Thesis worker, Laboratory of Industrial Chemistry and Polymer Technology, 1988-1989
- Study Secretary of the Department of Chemical Engineering 1987-1988
- Part time Teaching Assistant, Laboratory of Inorganic and Analytical Chemistry, 1986-1988

**Expert Lecturer** in educational events arranged by AEL, Finn-Fiber, Teollisuuden Oppimispaijka and Etelä-Karjalan aikuisopisto since 2000. Chemistry of papermaking as the subject.

## Supplementary education

Several professional courses and educational events.



Jonni Ahlgren